Improvements to roads and drains at Harohalli in Ward No.02 Chowdeshwari Ward

Date of Pre-Measurement :

Detailed Measurements

Item No	Discription of Item	Unit	No	Length	Breadth	Depth	Qty
1	KSRRB 300-1. **Earthwork excavation** by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (P.No-143, I.No-19.1)						
	For RCC Drain	Cum					
	Harohalli KEB Layout LHS						
	CH:0.00 to 30.00		1	30.00	1.10	1.00	33.00
	CH:30.00 to 60.00		1	30.00	1.10	1.00	33.00
	CH: 60.00 to 90.00		1	30.00	1.10	1.00	33.00
	CH: 90.00 to 120.00		1	30.00	1.10	1.00	33.00
	CH: 120.00 to 146.00		1	26.00	1.10	1.00	28.60
	Deduct Culvert		-1	7.00	1.10	1.00	-7.70
	Harohalli KEB Layout RHS						
	CH:0.00 to 30.00		1	30.00	1.10	1.00	33.00
	CH:30.00 to 60.00		1	30.00	1.10	1.00	33.00
	CH: 60.00 to 90.00		1	30.00	1.10	1.00	33.00
	CH: 90.00 to 120.00		1	30.00	1.10	1.00	33.00
	CH: 120.00 to 146.00		1	26.00	1.10	1.00	28.60
	End L Shape						
	CH:0.00 to 26.50		1	26.50	1.10	1.00	29.15
	Vaishnavi Layout LHS						
	CH:0.00 to 30.00		1	30.00	1.10	1.00	33.00
	CH:30.00 to 60.00		1	30.00	1.10	1.00	33.00
	CH: 60.00 to 79.80		1	18.90	1.10	1.00	20.79
	L shape						
	CH:0.00 to 23.40		1	23.40	1.10	1.00	25.74
	Vaishnavi Layout RHS						
	CH:0.00 to 30.00		1	30.00	1.10	1.00	33.00
	CH:30.00 to 60.00		1	30.00	1.10	1.00	33.00
	CH: 60.00 to 79.80		1	18.90	1.10	1.00	20.79
	L shape						
	CH:0.00 to 17.60		1	17.60	1.10	1.00	19.36

160.60
152.90
561.33

Asst. Executive Engi
Project Division
Yelahanka Zone
BBMP, Bangalore -

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	Culverts						
	KEB Layout		1	7.00	1.20	1.10	9.24
	at End		1	7.30	1.20	1.10	9.64
						Present Quantity	**580.21**
						Qunatity Paid in 1st Bill	**0.00**
						Total Quantity	**580.21**
						Deduct Qty Paid in 1st Bill	**0.00**
						Quantity to be paid	**580.21**

Contractor

PMC

Assistant Engineer

Asst. Executive Engineer,

Asst. Executive Engine
Project Division
Yelahanka Zone
BBMP, Bangalore - 9

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Improvements to roads and drains at Harohalli in Ward No.02 Chowdeshwari Ward

Date of Pre-Measurement :

Detailed Measurements

Item No	Discription of Item	Unit	No	Length	Breadth	Depth	Qty
2	KSRB M2100-10 : Providing and laying in position plain cement concrete of **Mix 1:3:6** with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum in foundation, machine mixed, Placed in foundation and compacted by viberation including curing for 14 days , including cost of all materials, labour, HOM curing, foam works, scaffolding and centring complete as per specifications Specification P.No. K22.1 No.27.18						
	For RCC Drain	Cum					
	Harohalli KEB Layout LHS						
	CH:0.00 to 30.00		1	30.00	1.00	0.15	4.50
	CH:30.00 to 60.00		1	30.00	1.00	0.15	4.50
	CH: 60.00 to 90.00		1	30.00	1.00	0.15	4.50
	CH: 90.00 to 120.00		1	30.00	1.00	0.15	4.50
	CH: 120.00 to 146.00		1	26.00	1.00	0.15	3.90
	Deduct Culvert		-1	7.00	1.00	0.15	-1.05
	Harohalli KEB Layout RHS						
	CH:0.00 to 30.00		1	30.00	1.00	0.15	4.50
	CH:30.00 to 60.00		1	30.00	1.00	0.15	4.50
	CH: 60.00 to 90.00		1	30.00	1.00	0.15	4.50
	CH: 90.00 to 120.00		1	30.00	1.00	0.15	4.50
	CH: 120.00 to 146.00		1	26.00	1.00	0.15	3.90
	End L Shape						
	CH:0.00 to 26.50		1	26.50	1.00	0.15	3.98
	Vaishnavi Layout LHS						
	CH:0.00 to 30.00		1	30.00	1.00	0.15	4.50
	CH:30.00 to 60.00		1	30.00	1.00	0.15	4.50
	CH: 60.00 to 79.80		1	18.90	1.00	0.15	2.84
	L shape						
	CH:0.00 to 23.40		1	23.40	1.00	0.15	3.51
	Vaishnavi Layout RHS						
	CH:0.00 to 30.00		1	30.00	1.00	0.15	4.50
	CH:30.00 to 60.00		1	30.00	1.00	0.15	4.50
	CH: 60.00 to 79.80		1	18.90	1.00	0.15	2.84
	L shape						
	CH:0.00 to 17.60		1	17.60	1.00	0.15	2.64
	Culverts						
	KEB Layout		1	7.00	1.00	0.15	1.05
	at End		1	7.30	1.00	0.15	1.10
	For CC Road	Cum					
	Harohalli KEB Layout Road	Width					
	CH:0.00 to 13.90	(7.00+7.00)/ 2	1	13.90	7.00	0.15	14.60

21.90
20.85
93.29

Asst. Executive Enginee
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Project Division
Yelahanka Zone
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	CH:13.90 to 43.90	(5.20+5.65)/2	1	30.00	5.43	0.15	24.44
	CH: 43.90 to 73.90	(5.65+5.60)/2	1	30.00	5.63	0.15	25.34
	CH: 73.90 to 103.90	(5.60+5.50)/2	1	30.00	5.55	0.15	24.98
	CH: 103.90 to 133.90	(5.50+5.50)/2	1	30.00	5.50	0.15	24.75
	CH: 133.90 to 146.00	(5.50+5.50)/2	1	21.10	5.50	0.15	17.41
	Vaishnavi Layout						
	CH:0.00 to 30.00	(6.70+6.80)/2	1	30.00	6.75	0.15	30.38
	CH:30.00 to 60.00	(6.80+6.80)/2	1	30.00	6.80	0.15	30.60
	CH: 60.00 to 79.80	(6.80+6.70)/2	1	29.80	6.75	0.15	30.17
	Deduct For House		-1	4.00	1.50	0.15	-0.90
	Cross Road to Sai Vihar Layout RHS						
	CH:0.00 to 30.00	(3.50+3.50)/2	1	30.00	3.50	0.15	15.75
	CH:30.00 to 45.00	(3.50 +3.20)/2	1	15.00	3.35	0.15	7.54
	Cross LHS Side						
	CH:0.00 to 30.00	(5.60+6.40)/2	1	30.00	6.00	0.15	27.00
	CH:30.00 to 60.00	(6.40+5.80)/2	1	30.00	6.10	0.15	27.45
	CH: 60.00 to 87.50	(5.80+5.00)/2	1	27.50	5.40	0.15	22.28
	CH: 87.50 to 93.40	(5.00+3.70)/2	1	5.90	4.35	0.15	3.85
	CH:93.40 to 112.00	(3.70+2.90)/2	1	18.60	3.30	0.15	9.21
	Light Poles		-4	0.30	0.10	0.15	-0.02
	Trees		-7	0.30	0.30	0.15	-0.09
	Planter Box		-3	5.00	2.00	0.15	-4.50
						Present Quantity	408.89
						Qunatity Paid in 1st Bill	0.00
						Total Quantity	408.89
						Deduct Qty Paid in 1st Bill	0.00
						Quantity to be paid	408.89

93.29 (4)
301.34
300.44
413.51

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

Contractor | PMC | Assistant Engineer | Asst. Executive Engineer

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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Improvements to roads and drains at Harohalli in Ward No.02 Chowdeshwari Ward

Date of Pre-Measurement :

Detailed Measurements

Item No	Discription of Item	Unit	No	Length	Breadth	Depth	Qty
3	Providing and laying plain/reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM complete as per specification. (P.No.271, I.No.37.59.2 of PW, P&IWTD S.R 2018-19)						
	For RCC Drain, Raft	Cum					
	Harohalli KEB Layout LHS						
	CH:0.00 to 30.00		1	30.00	0.90	0.15	4.05
	CH:30.00 to 60.00		1	30.00	0.90	0.15	4.05
	CH: 60.00 to 90.00		1	30.00	0.90	0.15	4.05
	CH: 90.00 to 120.00		1	30.00	0.90	0.15	4.05
	CH: 120.00 to 146.00		1	26.00	0.90	0.15	3.51
	Deduct Culvert		-1	7.00	0.90	0.15	-0.95
	Harohalli KEB Layout RHS						
	CH:0.00 to 30.00		1	30.00	0.90	0.15	4.05
	CH:30.00 to 60.00		1	30.00	0.90	0.15	4.05
	CH: 60.00 to 90.00		1	30.00	0.90	0.15	4.05
	CH: 90.00 to 120.00		1	30.00	0.90	0.15	4.05
	CH: 120.00 to 146.00		1	26.00	0.90	0.15	3.51
	End L Shape						
	CH:0.00 to 26.50		1	26.50	0.90	0.15	3.58
	Vaishnavi Layout LHS						
	CH:0.00 to 30.00		1	30.00	0.90	0.15	4.05
	CH:30.00 to 60.00		1	30.00	0.90	0.15	4.05
	CH: 60.00 to 79.80		1	18.90	0.90	0.15	2.55
	L shape						
	CH:0.00 to 23.40		1	23.40	0.90	0.15	3.16
	Vaishnavi Layout RHS						
	CH:0.00 to 30.00		1	30.00	0.90	0.15	4.05
	CH:30.00 to 60.00		1	30.00	0.90	0.15	4.05
	CH: 60.00 to 79.80		1	18.90	0.90	0.15	2.55
	L shape						
	CH:0.00 to 17.60		1	17.60	0.90	0.15	2.38
	Culverts						
	KEB Layout		1	7.00	0.90	0.20	1.26
	at End		1	7.30	0.90	0.20	1.31
	For RCC Drain, Side Walls	Cum					
	Harohalli KEB Layout LHS						
	CH:0.00 to 30.00		2	30.00	0.15	0.60	5.40
	CH:30.00 to 60.00		2	30.00	0.15	0.60	5.40

19.71

18.76

63.50

82.26

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore

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Project Division
Yelahanka Zone

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	CH: 60.00 to 90.00		2	30.00	0.15	0.60	5.40
	CH: 90.00 to 120.00		2	30.00	0.15	0.60	5.40
	CH: 120.00 to 146.00		2	26.00	0.15	0.60	4.68
	Deduct Culvert		-2	7.00	0.15	0.60	-1.26
	Harohalli KEB Layout RHS						
	CH:0.00 to 30.00		2	30.00	0.15	0.60	5.40
	CH:30.00 to 60.00		2	30.00	0.15	0.60	5.40
	CH: 60.00 to 90.00		2	30.00	0.15	0.60	5.40
	CH: 90.00 to 120.00		2	30.00	0.15	0.60	5.40
	CH: 120.00 to 146.00		2	26.00	0.15	0.60	4.68
	End L Shape						
	CH:0.00 to 26.50		2	26.50	0.15	0.60	4.77
	Vaishnavi Layout LHS						
	CH:0.00 to 30.00		2	30.00	0.15	0.60	5.40
	CH:30.00 to 60.00		2	30.00	0.15	0.60	5.40
	CH: 60.00 to 79.80		2	18.90	0.15	0.60	3.40
	L shape						
	CH:0.00 to 23.40		2	23.40	0.15	0.60	4.21
	Vaishnavi Layout RHS						
	CH:0.00 to 30.00		2	30.00	0.15	0.60	5.40
	CH:30.00 to 60.00		2	30.00	0.15	0.60	5.40
	CH: 60.00 to 79.80		2	18.90	0.15	0.60	3.40
	L shape						
	CH:0.00 to 17.60		2	17.60	0.15	0.60	3.17
	Culverts						
	KEB Layout		2	7.00	0.20	0.60	1.68
	at End		2	7.30	0.20	0.60	1.75
						Present Quantity	166.75
						Qunatity Paid in 1st Bill	0.00
						Total Quantity	166.75
						Deduct Qty Paid in 1st Bill	0.00
						Quantity to be paid	166.75

05-11-2019

53.580 53.26 (6) 96.48

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

MOHAN KUMA
Class-1 Contractor

Contractor

SHRIYA CONSTRUCTION AND CONSULTANCY

PMC

Assistant Engineer

Asst. Executive Engineer

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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Improvements to roads and drains at Harohalli in Ward No.02 Chowdeshwari Ward

Date of Pre-Measurement :

Detailed Measurements

Item No	Discription of Item	Unit	No	Length	Breadth	Depth	Qty
4	KSRRB - M2300-14: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.MORTH Specification No. 1600 & 2200 for TMT bars Fe 500. (P.No.239, I.No.29.29.2 of PW, P&IWTD S.R 2018-19)						
	For RCC Drain	MT					
	Harohalli						
	Harohalli KEB Layout LHS						
	Total Drain length=139.00m						
	Main bar 10mm dia bar @ 100mmC/c						
	10mm bar unit weight = 0.62kg/mtr		1380	2.10		0.62	1796.76
	Distribution bar 10mm dia 150mm C/c						
	10mm bar unit weight = 0.62kg/mtr		10	138.60		0.62	859.32
	Harohalli KEB Layout RHS						
	Total Drain length=146.00m						
	Main bar 10mm dia bar @ 100mmC/c						
	10mm bar unit weight = 0.62kg/mtr		1460	2.10		0.62	1900.92
	Distribution bar 10mm dia 150mm C/c						
	10mm bar unit weight = 0.62kg/mtr		10	145.60		0.62	902.72
	Vaishnavi Layout LHS						
	Total Drain length=102.30m						
	Main bar 10mm dia bar @ 100mmC/c						
	10mm bar unit weight = 0.62kg/mtr		992	2.10		0.62	1291.58
	Distribution bar 10mm dia 150mm C/c						
	10mm bar unit weight = 0.62kg/mtr		10	101.80		0.62	631.16
	Vaishnavi Layout RHS						
	Total Drain length=96.50 m						
	Main bar 10mm dia bar @ 100mmC/c						
	10mm bar unit weight = 0.62kg/mtr		958	2.10		0.62	1247.32
	Distribution bar 10mm dia 150mm C/c						
	10mm bar unit weight = 0.62kg/mtr		10	96.30		0.62	597.06

9226.84

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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	RCC Culverts						
	Total culvert Length=14.30 m						
	Main bar 12mm dia bar @ 100mmC/c						
	12mm bar unit weight = 0.89kg/mtr		140	1.95		0.89	242.97
	Distribution bar 10mm dia 150mm C/c						
	10mm bar unit weight = 0.62kg/mtr		11	14.00		0.62	95.48
						KG	9565.29
	Present Qty	**MT**			**Present Qty**		9.57
						Qunatity Paid in 1st Bill	0.00
						Total Quantity	9.57
						Deduct Qty Paid in 1st Bill	0.00
						Quantity to be paid	9.57

Contractor

PMC

Assistant Engineer

Asst. Executive Engineer

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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Improvements to roads and drains at Harohalli in Ward No.02 Chowdeshwari Ward

Date of Pre-Measurement :

Detailed Measurements

Item No	Discription of Item	Unit	No	Length	Breadth	Depth	Qty
7	KSRB 4-16 Providing and laying in position plain cement concrete mix 1:2:4 with OPC 240kgs with 20mm down size graded granite aggrigates @.878 cum and fine aggregates @.53 cum machine mixed concrete lain in layers not exceeding 15cms thick well compacted in foundation plinth and cills including cost of all materials and labour, HOM curing complete as per specifications . Specification no KB (P No 13, I No 4.6)						
		Cum					
	Harohalli KEB Layout LHS						
	CH:0.00 to 30.00		1	30.00	0.20	0.10	0.60
	CH:30.00 to 60.00		1	30.00	0.20	0.10	0.60
	CH: 60.00 to 90.00		1	30.00	0.20	0.10	0.60
	CH: 90.00 to 120.00		1	30.00	0.20	0.10	0.60
	CH: 120.00 to 146.00		1	26.00	0.20	0.10	0.52
	Deduct Culvert		-1	7.00	0.20	0.10	-0.14
	Harohalli KEB Layout RHS						
	CH:0.00 to 30.00		1	30.00	0.20	0.10	0.60
	CH:30.00 to 60.00		1	30.00	0.20	0.10	0.60
	CH: 60.00 to 90.00		1	30.00	0.20	0.10	0.60
	CH: 90.00 to 120.00		1	30.00	0.20	0.10	0.60
	CH: 120.00 to 146.00		1	26.00	0.20	0.10	0.52
	Vaishnavi Layout LHS						
	CH:0.00 to 30.00		1	30.00	0.20	0.10	0.60
	CH:30.00 to 60.00		1	30.00	0.20	0.10	0.60
	CH: 60.00 to 79.80		1	18.90	0.20	0.10	0.38
	Vaishnavi Layout RHS						
	CH:0.00 to 30.00		1	30.00	0.20	0.10	0.60
	CH:30.00 to 60.00		1	30.00	0.20	0.10	0.60
	CH: 60.00 to 79.80		1	18.90	0.20	0.10	0.38
	Deduct For House Area		-1	9.18	0.20	0.10	-0.18
						Present Quantity	8.67
						Qunatity Paid in 1st Bill	0.00
						Total Quantity	8.67
						Deduct Qty Paid in 1st Bill	0.00
						Quantity to be paid	8.67

2.92
2.78
8.86
8.68

Contractor

Assistant Engineer

Asst. Executive Engineer

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

MOHAN KUMAR ★ Class-1 Contractor ★

SHRIYA CONSTRUCTION AND CONSULTANCY

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Improvements to roads and drains at Harohalli in Ward No.02 Chowdeshwari Ward

Date of Pre-Measurement :

Detailed Measurements

Item No	Discription of Item	Unit	No	Length	Breadth	Depth	Qty
10	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (I No-19.14,P No-143)						
	RA Bill No 01						
	For CC Road	Cum					
	Harohalli KEB Layout Road	Width					
	CH:0.00 to 13.90	(7.00+7.00) /2	1	13.90	7.00	0.30	29.19
	CH:13.90 to 43.90	(5.20+5.65) /2	1	30.00	5.43	0.30	48.87
	CH: 43.90 to 73.90	(5.65+5.60) /2	1	30.00	5.63	0.30	50.67
	CH: 73.90 to 103.90	(5.60+5.50) /2	1	30.00	5.55	0.30	49.95
	CH: 103.90 to 133.90	(5.50+5.50) /2	1	30.00	5.50	0.30	49.50
	CH: 133.90 to 146.00	(5.50+5.50) /2	1	21.10	5.50	0.30	34.82
	Vaishnavi Layout						
	CH:0.00 to 30.00	(6.70+6.80) /2	1	30.00	6.75	0.30	60.75
	CH:30.00 to 60.00	(6.80+6.80) /2	1	30.00	6.80	0.30	61.20
	CH: 60.00 to 79.80	(6.80+6.70) /2	1	29.80	6.75	0.30	60.35
	Deduct For House		-1	4.00	1.50	0.30	-1.80
	Cross Road to Sai Vihar Layout RHS						
	CH:0.00 to 30.00	(3.50+3.50) /2	1	30.00	3.50	0.30	31.50
	CH:30.00 to 45.00	(3.50 +3.20)/2	1	15.00	3.35	0.30	15.08
	Cross LHS Side						
	CH:0.00 to 30.00	(5.60+6.40) /2	1	30.00	6.00	0.25	45.00
	CH:30.00 to 60.00	(6.40+5.80) /2	1	30.00	6.10	0.25	45.75
	CH: 60.00 to 87.50	(5.80+5.00) /2	1	27.50	5.40	0.25	37.13
	CH: 87.50 to 93.40	(5.00+3.70) /2	1	5.90	4.35	0.25	6.42
	CH:93.40 to 112.00	(3.70+2.90) /2	1	18.60	3.30	0.25	15.35

443.49

639.70

Asst. Executive Engineer
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Project Division
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CF 629.70 (11)

Light Poles		-4	0.30	0.10	0.25	-0.03
Trees		-7	0.30	0.30	0.25	-0.16
Planter Box		-3	5.00	2.00	0.25	-7.50
Present Qty	Cum					

7.69

Present Qty	632.01
Total Quantity	632.01
Qunatity Paid in 1st Bill	0.00
Qty to be Paid in 1st Bill	0.00
Quantity to be paid	632.01

Contractor

PMC

Assistant Engineer

Asst. Executive Engineer

Asst. Executive Engineer
Engineering Division
Yelahanka Zone
BBMP, Bangalore - 92

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Improvements to roads and drains at Harohalli in Ward No.02 Chowdeshwari Ward

Date of Pre-Measurement :

Detailed Measurements

Item No	Discription of Item	Unit	No	Length	Breadth	Depth	Qty
12	KSRRB M300-52.2: Compacting original ground by Mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per Specification Page No. 147. Item No. 19.64 PWD SR 2018-19						
		Sqm					
	For CC Road						
	Harohalli KEB Layout Road	Width					
	CH:0.00 to 13.90	(7.00+7.00)/ 2	1	13.90	7.00		97.30
	CH:13.90 to 43.90	(5.20+5.65)/ 2	1	30.00	5.43		162.90
	CH: 43.90 to 73.90	(5.65+5.60)/ 2	1	30.00	5.63		168.90
	CH: 73.90 to 103.90	(5.60+5.50)/ 2	1	30.00	5.55		166.50
	CH: 103.90 to 133.90	(5.50+5.50)/ 2	1	30.00	5.50		165.00
	CH: 133.90 to 146.00	(5.50+5.50)/ 2	1	21.10	5.50		116.05
	Vaishnavi Layout						
	CH:0.00 to 30.00	(6.70+6.80)/ 2	1	30.00	6.75		202.50
	CH:30.00 to 60.00	(6.80+6.80)/ 2	1	30.00	6.80		204.00
	CH: 60.00 to 79.80	(6.80+6.70)/ 2	1	29.80	6.75		201.15
	Deduct For House		-1	4.00	1.50		-6.00
	Cross Road to Sai Vihar Layout RHS						
	CH:0.00 to 30.00	(3.50+3.50)/ 2	1	30.00	3.50		105.00
	CH:30.00 to 45.00	(3.50 +3.20)/2	1	15.00	3.35		50.25
	Cross LHS Side, Sai Vihar Layout						
	CH:0.00 to 30.00	(5.60+6.40)/ 2	1	30.00	6.00		180.00
	CH:30.00 to 60.00	(6.40+5.80)/ 2	1	30.00	6.10		183.00
	CH: 60.00 to 87.50	(5.80+5.00)/ 2	1	27.50	5.40		148.50
	CH: 87.50 to 93.40	(5.00+3.70)/ 2	1	5.90	4.35		25.67

1484.30
1478.30
185.88
2170.72

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

SHRIYA CONSTRUCTION AND CONSULTANCY

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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	CH:93.40 to 112.00	(3.70+2.90)/ 2	1	18.60	3.30		61.38
	Light Poles		-4	0.30	0.10		-0.12
	Trees		-7	0.30	0.30		-0.63
	Planter Box		-3	5.00	2.00		-30.00
		Sqm				Present Qty	2201.35
						Total Quantity	2201.35
						Qunatity Paid in 1st Bill	0.00
						Qty to be Paid in 1st Bill	0.00
						Quantity to be paid	2201.35

MOHAN KUMA... Class-1 Contractor
Contractor

SHRIYA CONSTRUCTION AND CONSULTANCY
PMC

Assistant Engineer

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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Improvements to roads and drains at Harohalli in Ward No.02 Chowdeshwari Ward

Date of Pre-Measurement :

Detailed Measurements

Item No	Discription of Item	Unit	No	Length	Breadth	Depth	Qty
13	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material,mixing by mix in place method with rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision.9(I No. -20.5, P No 153						
	For CC Road	Cum					
		Width					
	Harohalli KEB Layout Road	Width					
	CH:0.00 to 13.90	(7.00+7.00)/ 2	1	13.90	7.00	0.15	14.60
	CH:13.90 to 43.90	(5.20+5.65)/ 2	1	30.00	5.43	0.15	24.44
	CH: 43.90 to 73.90	(5.65+5.60)/ 2	1	30.00	5.63	0.15	25.34
	CH: 73.90 to 103.90	(5.60+5.50)/ 2	1	30.00	5.55	0.15	24.98
	CH: 103.90 to 133.90	(5.50+5.50)/ 2	1	30.00	5.50	0.15	24.75
	CH: 133.90 to 146.00	(5.50+5.50)/ 2	1	21.10	5.50	0.15	17.41
	Vaishnavi Layout						
	CH:0.00 to 30.00	(6.70+6.80)/ 2	1	30.00	6.75	0.15	30.38
	CH:30.00 to 60.00	(6.80+6.80)/ 2	1	30.00	6.80	0.15	30.60
	CH: 60.00 to 79.80	(6.80+6.70)/ 2	1	29.80	6.75	0.15	30.17
	Deduct For House		-1	4.00	1.50	0.15	-0.90

222.65

221.75

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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	Cross Road to Sai Vihar Layout RHS						
	CH:0.00 to 30.00	(3.50+3.50)/2	1	30.00	3.50	0.15	15.75
	CH:30.00 to 45.00	(3.50 +3.20)/2	1	15.00	3.35	0.15	7.54
	Cross LHS Side Cross Road to Sai Vihar Layout						
	CH:0.00 to 30.00	(5.60+6.40)/2	1	30.00	6.00	0.15	27.00
	CH:30.00 to 60.00	(6.40+5.80)/2	1	30.00	6.10	0.15	27.45
	CH: 60.00 to 87.50	(5.80+5.00)/2	1	27.50	5.40	0.15	22.28
	CH: 87.50 to 93.40	(5.00+3.70)/2	1	5.90	4.35	0.15	3.85
	CH:93.40 to 112.00	(3.70+2.90)/2	1	18.60	3.30	0.15	9.21
	Light Poles		-4	0.30	0.10	0.15	-0.02
	Trees		-7	0.30	0.30	0.15	-0.09
	Planter Box		-3	5.00	2.00	0.15	-4.50
	Present Qty	**Cum**			**Present Qty**		**330.20**
						Total Quantity	**330.20**
						Qunatity Paid in 1st Bill	**0.00**
						Qty to be Paid in 1st Bill	**0.00**
						Quantity to be paid	**330.20**

(15)

334.82

4.61

MEASUREMENT SHEETS

"FIRST & FINAL BILL"

MOHAN KUMA... Class-1 Contractor

Contractor

PMC

SHRIYA CONSTRUCTION AND CONSULTANCY

Assistant Engineer

Asst. Executive Engineer

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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1st Bill & Part Bill

Improvements to roads and drains at Harohalli in Ward No.02 Chowdeshwari Ward

Work Order No.: EE(Project)/ YNK Zone/ WO/(000009/ 2022-23, Dated : 08.08.2022

Job code: 005-21-000014

Est. cost: 99.00 lakhs

Name Of contractor: Sri Mohan Kumar S R

Measurements

Item No	Discription of Item	Unit	No	Length	Breadth	Depth	Qty	Rate	Amount
1	KSRRB 300 - Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. MORTH / Chapter 3 (P.No-143, I.No-19.1)								
	Pre Measurements recorded in Vide Excel Sheet page no (2)	CUM					580.21	217.43	1,26,154.00
2	KSRB M2100-10 : Providing and laying in position plain cement concrete of Mix 1:3:6 with OPC @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @0.46cum in foundation, machine mixed, Placed in foundation and compacted by viberation including curing for 14 days , including cost of all materials, labour, HOM curing, foam works, scaffolding and centring complete as per specifications. Specification. P No. K222, I No 27.18								
	Pre Measurements recorded in Vide Excel Sheet page no (4)	CUM					408.89	5476.14	22,39,148.00
3	Providing and laying plain/ reinforced cement concrete for side drains using M20 nominal mix concrete with OPC at 300 kgs. With 20mm and sown size granite metal course aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compcted for walls and bottom including centring shuttering cost of material HOM of machinary curing etc., complete execluding cost of steel as per MORTH specification no. 1500, 1700, 2200 including cost of material labour HOM complete as per specification. (P.No.271, I.No.37.59.2 of PW, P&IWTD S.R 2018-19)								
	Pre Measurements recorded in Vide Excel Sheet page no (6)	CUM					166.75	7140.93	11,90,754.00
4	KSRRB - M2300-14: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications.MORTH Specification No. 1600 & 2200 for TMT bars Fe 500. (P.No.239, I.No.29.29.2 of PW, P&IWTD S.R 2018-19)								
	Pre Measurements recorded in Vide Excel Sheet page no (8)	MT					9.57	74732.44	7,14,837.00
7	KSRB 4-16 Providing and laying in position plain cement concrete mix 1:2:4 with OPC 240kgs with 20mm down size graded granite aggrigates @.878 cum and fine aggregates @.53 cum machine mixed concrete lain in layers not exceeding 15cms thick well compacted in foundation plinth and cills including cost of all materials and labour, HOM curing complete as per specifications . Specification no KB (P No 13, I No 4.6)								
	Pre Measurements recorded in Vide Excel Sheet page no (9)	MT					8.67	5804.81	50,342.00

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10	KSRRB M300-14. Excavation for roadwork in all types of soil by mechanical means including cutting and loading to tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transportation with a lead of 1.00 km and complete as per specifications MORTH Specificatio MORTH Specification No.301Loading and unloading with 10km lead= (1 No-19.14,P No-143)								
	Pre Measurements recorded in Vide Excel Sheet page no (11)	CUM					632.01	64.58	40,815.00
11	KSRRB M300-52.2. Scarifying the Existing Bituminous surface to a depth of 50mm by Mechanical Means. Scarifying the existing bituminous road surface to a depth of 50mm and disposal of scarified material and complete as per specifications.MORTH Specification No. 305.4.3(P-146 , I.no 19.59).								
	Pre Measurements recorded in Vide Excel Sheet page no (13)	SQM					0.00	0.00	-
12	KSRRB M300-52.2: Compacting original ground by Mechanical means including filling in depression occuring during rolling including cost of all labour, HOM complete as per Specification Page No. 147. Item No. 19.64 PWD SR 2018-19								
	Pre Measurements recorded in Vide Excel Sheet page no	SQM					2201.35	6.43	14,155.00
13	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material,mixing by mix in place method with rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision.9(I No. -20.5, P No 153								
	Pre Measurements recorded in Vide Excel Sheet page no (15)	CUM					330.20	2014.86	6,65,310.00

MOHAN KUMAR ★ Class-1 Contractor ★ Contractor

SHRIYA CONSTRUCTION AND CONSULTANCY ★ PVT. LTD.

Assistant Engineer

Asst. Executive Engineer

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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Improvements to roads and drains at Harohalli in Ward No.02 Chowdeshwari Ward

Date of Measurement :

Detailed Measurements

Item No	Discription of Item	Unit	No	Length	Breadth	Depth	Qty	Rate	Amount
5	Providing and fixing RCC precast cover slab of 100mm thick for drain in cement concrete 1:1.5:3 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	For drain cover slab	**Sqm**							
	For RCC Drain								
	Harohalli KEB Layout LHS								
	CH:0.00 to 30.00		1	30.00	0.90		27.00		
	CH:30.00 to 60.00		1	30.00	0.90		27.00		
	CH: 60.00 to 90.00		1	30.00	0.90		27.00		
	CH: 90.00 to 120.00		1	30.00	0.90		27.00		
	CH: 120.00 to 146.00		1	26.00	0.90		23.40		
	Deduct Culvert		-1	7.00	0.90		-6.30		
	Harohalli KEB Layout RHS								
	CH:0.00 to 30.00		1	30.00	0.90		27.00		
	CH:30.00 to 60.00		1	30.00	0.90		27.00		
	CH: 60.00 to 90.00		1	30.00	0.90		27.00		
	CH: 90.00 to 120.00		1	30.00	0.90		27.00		
	CH: 120.00 to 146.00		1	26.00	0.90		23.40		
	End L Shape								
	CH:0.00 to 26.50		1	26.50	0.90		23.85		
	Vaishnavi Layout LHS								
	CH:0.00 to 30.00		1	30.00	0.90		27.00		
	CH:30.00 to 60.00		1	30.00	0.90		27.00		
	CH: 60.00 to 79.80		1	18.90	0.90		17.01		
	Deduct For House		-1	9.15	0.90				
	L shape								
	CH:0.00 to 23.40		1	23.40	0.90		21.06		
	Vaishnavi Layout RHS								
	CH:0.00 to 30.00		1	30.00	0.90		27.00		
	CH:30.00 to 60.00		1	30.00	0.90		27.00		
	CH: 60.00 to 79.80		1	18.90	0.90		17.01		
	L shape								
	CH:0.00 to 17.60		1	17.60	0.90		15.84		
						Present Quantity	459.27		
						Qunatity Paid in 1st Bill	0.00		
						Total Quantity	459.27		
						Deduct Qty Paid in 1st Bill	0.00		
						Quantity to be paid	459.27	2360.38	1084051.72

Contractor

Assistant Engineer

Asst. Executive Engineer,

PMC

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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Improvements to roads and drains at Harohalli in Ward No.02 Chowdeshwari Ward

Date of Measurement :

Detailed Measurements

Item No	Discription of Item	Unit	No	Length	Breadth	Depth	Qty	Rate	Amount
6	Providing and fixing RCC precast cover slab of 250mm thick made out of CC 1:2:4 and jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate)								
	For Culvert Slabs	Sqm							
	Culverts								
	KEB Layout		1	7.00	1.20		8.40		
	at End		1	7.30	1.20		8.76		
						Present Quantity	17.16		
						Qunatity Paid in 1st Bill	0.00		
						Total Quantity	17.16		
						Deduct Qty Paid in 1st Bill	0.00		
						Quantity to be paid	17.16	5472.20	93902.95

Contractor

Assistant Engineer
BMC

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

Asst. Executive Engineer

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Improvements to roads and drains at Harohalli in Ward No.02 Chowdeshwari Ward

Date of Measurement :

Detailed Measurements

Item No	Discription of Item	Unit	No	Length	Breadth	Depth	Qty	Rate	Amount
8	Providing and fixing pre cast solid cement concrete kerb stones made out of C.C 1:2:4 with top and bottom width 114 and 165mm repectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork curing, including, cost of all materials, labour hire charges of machinery, loading unloading, lead and lift, transportation etc, complete. Page No. 27/ Item No. 5.30/ PWD SR 2018-19								
		Nos							
	Harohalli KEB Layout LHS								
	CH:0.00 to 30.00		1	30.00			30.00		
	CH:30.00 to 60.00		1	30.00			30.00		
	CH: 60.00 to 90.00		1	30.00			30.00		
	CH: 90.00 to 120.00		1	30.00			30.00		
	CH: 120.00 to 146.00		1	26.00			26.00		
	Deduct Culvert		-1	7.00			-7.00		
	Harohalli KEB Layout RHS								
	CH:0.00 to 30.00		1	30.00			30.00		
	CH:30.00 to 60.00		1	30.00			30.00		
	CH: 60.00 to 90.00		1	30.00			30.00		
	CH: 90.00 to 120.00		1	30.00			30.00		
	CH: 120.00 to 146.00		1	26.00			26.00		
	Vaishnavi Layout LHS								
	CH:0.00 to 30.00		1	30.00			30.00		
	CH:30.00 to 60:00		1	30.00			30.00		
	CH: 60.00 to 79.80		1	30.00			30.00		
	Vaishnavi Layout RHS								
	CH:0.00 to 30.00		1	30.00			30.00		
	CH:30.00 to 60.00		1	30.00			30.00		
	CH: 60.00 to 79.80		1	30.00			30.00		
	Deduct For House Area			9.18			-9.18		
							455.82		
						Present Quantity / .45	1013.00		
						Qunatity Paid in 1st Bill	0.00		
						Total Quantity	1013.00		
						Deduct Qty Paid in 1st Bill	0.00		
						Quantity to be paid	1013.00	436.81	442488.53

Assistant Engineer

Asst. Executive Engineer

Contractor

PMC

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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Improvements to roads and drains at Harohalli in Ward No.02 Chowdeshwari Ward

Date of Measurement :

Detailed Measurements

Item No	Discription of Item	Unit	No	Length	Breadth	Depth	Qty	Rate	Amount
9	Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 Specification No. KSRRB M800-6. (P.No.180, I.No.24.1 of PW, P&IWTD SR 2018-19)								
		Sqm							
	Harohalli KEB Layout LHS								
	CH:0.00 to 30.00		1	30.00		0.35	10.50		
	CH:30.00 to 60.00		1	30.00		0.35	10.50		
	CH: 60.00 to 90.00		1	30.00		0.35	10.50		
	CH: 90.00 to 120.00		1	30.00		0.35	10.50		
	CH: 120.00 to 146.00		1	26.00		0.35	9.10		
	Deduct Culvert		-1	7.00		0.35	-2.45		
	Harohalli KEB Layout RHS								
	CH:0.00 to 30.00		1	30.00		0.35	10.50		
	CH:30.00 to 60.00		1	30.00		0.35	10.50		
	CH: 60.00 to 90.00		1	30.00		0.35	10.50		
	CH: 90.00 to 120.00		1	30.00		0.35	10.50		
	CH: 120.00 to 146.00		1	26.00		0.35	9.10		
	Vaishnavi Layout LHS								
	CH:0.00 to 30.00		1	30.00		0.35	10.50		
	CH:30.00 to 60.00		1	30.00		0.35	10.50		
	CH: 60.00 to 79.80		1	30.00		0.35	10.50		
	Vaishnavi Layout RHS								
	CH:0.00 to 30.00		1	30.00		0.35	10.50		
	CH:30.00 to 60.00		1	30.00		0.35	10.50		
	CH: 60.00 to 79.80		1	30.00		0.35	10.50		
	Deduct For House Area		-1	9.18		0.35	-3.21		
	Present Quantity						159.54		
	Qunatity Paid in 1st Bill						0.00		
	Total Quantity						159.54		
	Deduct Qty Paid in 1st Bill						0.00		
	Quantity to be paid						159.54	85.65	13664.34

Contractor

Assistant Engineer

PMC

Asst. Executive Engineer

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

Scanned by TapScanner

Improvements to roads and drains at Harohalli in Ward No.02 Chowdeshwari Ward

Date of Measurement :

Detailed Measurements

Item No	Discription of Item	Unit	No	Length	Breadth	Depth	Qty	Rate	Amount
14	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum, over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008, mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all lead & lift charges etc., complete as per specifications. (P.No-176,I No-22.6.1)								
	RAB No 01								
	For RCC Road	Cum							
	Harohalli KEB Layout Road	Width							
	CH:0.00 to 13.90	(7.00+7.00) /2	1	13.90	7.00	0.15	14.60		
	CH:13.90 to 43.90	(5.20+5.65) /2	1	30.00	5.43	0.15	24.44		
	CH: 43.90 to 73.90	(5.65+5.60) /2	1	30.00	5.63	0.15	25.34		
	CH: 73.90 to 103.90	(5.60+5.50) /2	1	30.00	5.55	0.15	24.98		
	CH: 103.90 to 133.90	(5.50+5.50) /2	1	30.00	5.50	0.15	24.75		
	CH: 133.90 to 146.00	(5.50+5.50) /2	1	21.10	5.50	0.15	17.41		
	Vaishnavi Layout								
	CH:0.00 to 30.00	(6.70+6.80) /2	1	30.00	6.75	0.15	30.38		
	CH:30.00 to 60.00	(6.80+6.80) /2	1	30.00	6.80	0.15	30.60		
	CH: 60.00 to 79.80	(6.80+6.70) /2	1	29.80	6.75	0.15	30.17		
	Deduct For House		-1	4.00	1.50	0.15	-0.90		
	Cross Road to Sai Vihar Layout RHS								
	CH:0.00 to 30.00	(3.50+3.50) /2	1	30.00	3.50	0.15	15.75		
	CH:30.00 to 45.00	(3.50 +3.20)/2	1	15.00	3.35	0.15	7.54		
	Cross LHS Side								
	CH:0.00 to 30.00	(5.60+6.40) /2	1	30.00	6.00	0.15	27.00		
	CH:30.00 to 60.00	(6.40+5.80) /2	1	30.00	6.10	0.15	27.45		
	CH: 60.00 to 87.50	(5.80+5.00) /2	1	27.50	5.40	0.15	22.28		
	CH: 87.50 to 93.40	(5.00+3.70) /2	1	5.90	4.35	0.15	3.85		
	CH:93.40 to 112.00	(3.70+2.90) /2	1	18.60	3.30	0.15	9.21		
	Light Poles		-4	0.30	0.10	0.15	-0.02		
	Trees		-7	0.30	0.30	0.15	-0.09		
	Planter Box		-3	5.00	2.00	0.15	-4.50		

SHRIJYA CONSTRUCTION AND CONSULTANCY

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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330.21

	Present Qty	Cum			Present Qty	330.20		
					Total Quantity	330.20		
					Qunatity Paid in 1st Bill	0.00		
					Qty to be Paid in 1st Bill	0.00		
					Quantity to be paid	330.20	5263.00	1737851.81
							Total	84,13,475.00
							GST charges (18%)	10,09,617.00
							Grand Total	94,23,092.00

MOHAN KUMA... Class-1 Contractor

Contractor

SHRIYA CONSTRUCTION AND CONSULTANCY

Assistant Engineer

Asst. Executive Engineer,

Asst. Executive Engineer
Project Division
Yelahanka Zone
BBMP, Bangalore - 92

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